



PCT/AU2004/001695

Patent Office
Canberra

I, LEANNE MYNOTT, MANAGER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2003906779 for a patent by INTERNATIONAL GROCERY MANUFACTURER PTY LTD as filed on 05 December 2003.



WITNESS my hand this
Sixteenth day of December 2004

A handwritten signature in ink, appearing to be 'LM' or similar initials.

LEANNE MYNOTT
MANAGER EXAMINATION SUPPORT
AND SALES

BEST AVAILABLE COPY

AUSTRALIA
Patents Act 1990

PROVISIONAL SPECIFICATION

Applicant(s):

INTERNATIONAL GROCERY MANUFACTURER PTY LTD
A.C.N. 100 896 722

Invention Title:

GLOVE DISPLAY PACKAGE

The invention is described in the following statement:

GLOVE DISPLAY PACKAGE

The Field of the Invention

5 The present invention relates generally to
packaging of products, particularly the packaging of
products allowing display of the products. More
particularly, the present invention relates to packaging
for displaying individual items, or pairs or groups of
10 items or the like, such as pairs of identical or
substantially identical items in which the items are
compressed to occupy a smaller volume by the packaging.
Even more particularly, the present invention relates to
packaging for gloves, such as rubber or latex gloves or
15 similar products for display in a retail environment, such
as for example, for sale in a department store, a
supermarket or other retail establishment in which the
packaging is of a reduced volume. The present invention
finds particular application as a package for and packaging
20 of gloves in which the gloves are compressed to occupy a
smaller space or volume as compared to the at rest or
unrestrained size of the gloves.

 Although the present invention will be described
25 with particular reference to one form of packaging for one
form of gloves it is to be noted that the scope of the
present invention is not restricted to the described
embodiments but rather the scope of the present invention
is more extensive so as to include other forms and
30 arrangements of the packaging, the packaging of products
other than gloves and to other methods of packaging items
or the like.

Background to the Invention

35 Gloves, particularly domestic rubber gloves or
the like are either available loose or are typically

packaged loosely within glossy plastic pockets or envelopes such as for example plastic bags. The gloves inside the pockets are not typically secured within the pocket but rather are placed inside the package in a loose or free
5 manner. Such currently available packaging is easy to manufacture and permits the glove to be readily inserted into the plastic bag. However, currently available packaging of this type for products such as rubber gloves suffer from a number of disadvantages.

10

The glossy plastic pockets can be costly to produce in limited production runs as the printing of the packaging on a per item basis is expensive as it is necessary to produce printing plates that are able to print
15 the pockets. The production of the printing plates is very costly which costs can only be defrayed over a small number of packages. The cost of using such printing techniques is prohibitive unless the production runs are exceedingly large. Thus, there is a need to reduce the cost of
20 packaging of individual, pairs or groups of items, particularly for small production runs.

Another problem of currently available packaging for rubber gloves relates to the volume occupied by the
25 gloves and the packaging. As some gloves, particularly domestic rubber gloves or the like, are made of semi-rigid or flexible materials and additionally because of the method of manufacturing the gloves and their intended use the gloves tend to adopt a slightly expanded/inflated
30 condition in the package, particularly when the gloves are folded within the package which sometimes traps air in sealed cavities within the glove formed when the glove is folded. The sealed cavities prevent air from being expelled from the gloves and contribute to the gloves being
35 bulky or inflated. The increased bulk and volume of the packaging results in transportation costs being higher than is necessary and the space available for displaying such

packaging on the supermarket shelves or the like is greater than would otherwise be required. Thus, there is a need for packaging of rubber gloves that is suitable for displaying the gloves yet occupies a lesser amount of space both in transportation and during display by allowing the gloves to compress during packaging and/or be maintained in a compressed state until the package is opened to retrieve the gloves for use.

Therefore, it is an aim of the present invention to provide packaging for items, particularly for rubber gloves or similar products that allows the rubber gloves to be compressed and which avoids the high cost of printing on the external surface of the gloves.

Summary of the Invention

According to one aspect of the present invention there is provided a package for an item or items, preferably items that are compressible comprising:

a support or backing member upon which the item or items can be located;

at least one compression member moveably connected or attached to the support or backing member, said compression member being moveable to a compression position so as to be capable of compressing the item or items when the item or items are located substantially on the support or backing member; and

a cover member capable of substantially enveloping or being located around the item or items when located on the supporting or backing member intermediate the support or backing member and the compression member such that the location of the cover member over the arrangement of the compression member, the item or items and the backing member allows the package to be compressed by the compression member bearing against the backing member to reduce the size of the item or items located

there between thereby compressing the item inside the packaging so as to reduce the bulk or volume of the item and/or of the package.

5 According to another aspect of the present invention there is provided a method of packaging at least one item, preferably a pair of items, comprising placing at least one of the items between a supporting or backing member and at least one compression member, substantially
10 enveloping the arrangement of the item, supporting member and compression member using a cover member, and causing the cover member to reduce in volume, thereby forming a package containing the item in which the cover member compresses the compression member against the support
15 member so as to compress the item inside the package thereby reducing the size of the item and/or package containing the item.

 Typically the backing or support member of the
20 present invention is made from cardboard or similar paper or cardboard products. Typically, the backing member is a blank having a central portion or panel for supporting the item or items. More particularly the central portion is planar. More typically the central panel is of a complex
25 shape having a square or rectangular portion and a curved or semi circular portion. More typically, the rectangular portion is a lower portion and the curved portion is an upper portion.

30 Typically, the central panel is provided with a locator for locating the item or items on the central panel. More typically, the locator is located along the lower edge of the central panel. Even more typically, the locator is a groove, rebate, cut-out, slot, cut-away, or
35 the like over which the item is folded. Even more typically, the ends of the locator are inclined, preferably oppositely inclined to one another, to assist in locating

the item in the folded condition on the central panel. The inclined ends are angled to prevent the folded glove from being displaced from the backing sheet by cooperative engaging the sides of the glove. In another embodiment the ends of the locator are guide means for guiding the gloves into position. Typically, the guide means is a shoulder, preferably a rectilinear shoulder.

Typically the blank includes at least one compression member or two or more compression members. Typically the or each compression member is hingedly connected to the backing member so as to be moveable between an open position allowing the glove to be placed on the central panel of the backing member and a closed position for applying compression to the item or items. More typically there are two compression members. More typically both compression members are hingedly connected to the backing member. Typically one compression member is attached on one side of the backing member whereas the other compression member is attached on the other side of the backing member. Typically, the or each compression member is attached to part of a lateral side of the central panel. More typically the first compression member is hingedly moveable to be superimposable over the front face of the backing member whereas the second compression member is hingedly moveable to be superimposable on the reverse face thereby forming a multi-layer or multi-component system or arrangement.

Typically the cover is a flexible cover made from a film, sheet, membrane or other flexible planar element or the like. Typically the cover is moveable. More typically the cover is compressibly moveable. Even more typically the cover member is a shrink wrap film, sheet or other covering. Typically the shrink wrap film or sheet is compressible or contractible by the application of heat. More typically, the cover forms the outer layer of the

package on both sides of the package. Typically, the cover is a fully sealed bag that compresses the gloves to form a package of reduce volume.

5 Typically the item or items are made from flexible material. More typically the flexible material is natural or synthetic. More typically, the item is provided with cavities, pockets, folds or similar in which air can
10 during packaging. Even more typically the item or items are gloves. Even more typically the gloves are made from rubber or latex or similar product.

15 Typically the package is a sandwich construction in which the gloves are squeezed between the compressible member and the backing member. More typically a first part of the glove is squeezed between the first compressible member and the backing sheet whereas a second part of the glove is
20 squeezed between the second compression member and the backing plate.

 Typically the backing member is provided with a first fastening element. More typically the compressing member is provided with a second fastening element.
25 Typically the first and second fastening elements are complementary to one another. Even more typically the fastening elements are releasably securable. Even more typically the fastening elements are cooperatively engageable with one another.

30 Typically one form of the fastening elements are a tab, lug, tongue, tag, or the like. Typically another form of the fastening element is a slot, groove, aperture, slit, mouth, cutout or similar. Typically the support or
35 backing member is provided with a display portion over which the compression member is not folded or superposed. More typically the display portion allows the item within

the package to be visible at the point of sale when the cover member is in place.

Typically, the front or rear sides or faces or
5 both faces or sides of the central panel are provided with
printing. More typically, the outwardly facing face or
side of one or all or any combination of folded compression
members on flaps are provided with printing so that no
additional insert or frame containing printing is required
10 to complete the package.

The present invention uses at least one
compression member in conjunction with a shrink wrap film
or sheet in the form of a bag or envelope or the like to
15 compress the at rest volume of the glove inside the package
by using a shrink wrap process. This packaging therefore
reduces the typical pack size for gloves, giving the
package a more compact appearance and allowing more gloves
to be displayed on a typical retail shelf space.

20 The support board is typically a flat, planar
sheet. However, the two dimensional shape of the support
board can be of any desired shape, as long as support board
has a sufficient planar area onto which the glove can be
25 placed. Therefore, the overall size and shape of the
support board is substantially determined by the size,
shape and orientation of the gloves to be packaged within
the glove package of the present invention. Many
variations are possible.

30 It is to be noted that when the glove or gloves
are folded about the backing member the folding is
performed in such a manner that air is expelled from the
interior of the glove so that the glove is substantially
35 free of air or at least is of a reduced volume when
compared to the normal size or volume adopted by the glove.
In one embodiment the finger portion of the glove is placed

upon the backing member and the wrist portion of the glove is folded over thereby allowing air to be expelled through the open end of the glove.

5 In one embodiment of the invention the gloves are placed on the support board in a folded state. Here the glove may be folded lengthways, widthways or a combination of two or more different folds or the like. In another embodiment of the present invention the glove is folded
10 around an edge of the support board so that part of the glove is on one side of the support board and another part of the glove is on another side of the support board ie on the obverse face and on the reverse face. Further embodiments of the present invention could use rolled
15 gloves, unfolded gloves or the like. In each case, the support board is sized to substantially fit the shape of the glove to be packaged in accordance with requirements.

 Preferably, the support board also has an
20 attachment means for attaching the package to a hook or display means. Preferably, the attachment means comprises a hole or aperture formed in an appropriate location on the support board. Typically, the aperture is formed in an upper region of the support board so as to allow the glove
25 package to be hung on a display means in an upright orientation.

 The compression member is also typically a flat planar board. The size and shape of the compression member
30 must be such that a sufficient contact area is provided with the glove to suitably compress the glove between the compression member and the support board once the shrink wrap is applied. Accordingly, it is preferable that the glove covers a sufficient area of the support board to
35 substantially compress the glove located between the compression member and support board.

In this regard, it is preferable that the compression member overlaps at least $1/3$ the glove placed on the support board on which the glove is placed. Therefore, the compression member covers at least $1/3$ the surface area of the support board on which the glove is placed. More preferably, the compression member overlaps at least $1/2$ the glove placed on the support board on which the glove is placed. Typically, not all the glove is covered by the compression member. This is to allow a consumer to inspect the appearance of the glove through the shrink wrap, provided the shrink wrap is substantially transparent.

It is also preferable that the compression member and support board are formed from a single piece of material. Typically, the combined support board and compression member or members is in the form of a blank. Therefore, the compression member is typically secured to at least one edge of the support board. More preferably, the compression member is part of the support board and is substantially folded over the support board once the glove is placed on the support board. In this respect, the compression member hinges about a line at the edge connecting the support board and the compression member, preferably a lateral side edge.

In an embodiment of the invention the compression member is also secured to a further portion of the support board. Preferably, the compression member is connected to part of the support board at a first edge of the compression member and has a second free edge which can be secured to another portion of the support board using a securing means. Again the compression member is substantially folded over the support board once the glove is placed on the support board. However, in this embodiment the free end of the compression member is secured to another part of the support member, thereby securing the

glove between the compression member and support board before the shrink wrap is applied.

5 Preferably, the free edge and first edges are opposite edges of the compression member. Preferably, the free edge and first edges of the compression member are secured/connected to opposite edges of the support board.

10 The securing means can be any means of affixing an edge of the compression member to a portion of the support board. In one embodiment of the present invention, the securing means comprises a resin, adhesive, glue, adhesive tape or other type of adhesive product. In
15 another embodiment of the invention the free edge of the compression member contains a tab which is inserted into and secured within a corresponding aperture such as for example a slot, slit, or the like in a portion of the support board. In yet a further embodiment of the present
20 invention the securing means comprises a hook like device which can be secured into a ring like device affixed to a portion of the support board.

25 It is also possible to have more than one compression member to compress a glove packaged in the glove packaging of the present invention. In one preferable embodiment of the present invention, the glove package comprises two compression members. Preferably, each compression member is placed over a portion of a glove on different sides of the support board. Preferably, each
30 compression member compresses each portion of the glove against the support board separately after the shrink wrap has been applied to the compression member, glove and support board combination.

35 In one form of the package the glove is folded around an edge of the support board such that a first portion of the glove is positioned on one side of the

support board and a second portion of the glove is positioned on another side of the support board. A first compression member is placed on top of the first portion of the glove and a second compression member is placed over the second portion of the glove. This arrangement compresses the glove in two locations after the shrink wrap has been applied to the compression member, glove and support board combination.

In another embodiment of the invention, the support board contains a recess or aperture in an edge or face through which the glove can be passed. In this manner, a first portion of the glove can be positioned on one side of the support board, part of the glove passed through or around the aperture so that a second portion of the glove is positioned on another side of the support board. Again, this arrangement compresses the glove in two locations after the shrink wrap has been applied to the compression member, glove and support board combination.

As note above, it is preferable that the compression member and support board are formed from a single piece of material. Therefore, each compression member is typically secured to at least one edge of the support board. More preferably, the or each compression member is secured to a different edge the support board. Even more preferably, each compression member is secured to an opposite edge the support board. This allows each compression member to be folded substantially over the support board once the glove is placed on the support board over opposite but proximate areas of the glove and support board.

As both the compression member and support board are used to compress the glove within the package, it is preferable that the support board and compression member are constructed of a stiff material such as thick paper, cardboard, paperboard, plastic or similarly stiff material. More preferably, the compression member and support board

comprises the same material as the support board.

It is preferable that the shrink wrap substantially compresses any gap between the or each compression member and support board to be substantially compressed by the application of the shrink wrap cover. Accordingly, sufficient heat must be applied to sufficiently shrink the shrink wrap around the compression member, glove and support board combination.

Furthermore, it is preferable that the shrink wrap cover is substantially transparent. Accordingly, the glove, compression board and support board are visible through the shrink wrap. With substantially transparent shrink wrap, any printing desired for the packaging is preferably applied to a surface of the support board and/or the compression member, typically the reverse side of the compression member. In this respect, the printing does not have to be applied to the shrink wrap but can be inexpensively applied to the paper or end product.

Brief Description of the Drawings

The present invention will now be described with reference to the figures of the accompanying drawings, which illustrate a particular preferred embodiment thereof by way of non-limiting example, wherein:

Figure 1 is a plan view of one form of a blank comprising the backing member in the form of a central panel and two compression members in the form of side panels extending outwardly from either lateral side of the central panel.

Figure 2 is a side perspective view of one embodiment of the glove showing location of the glove in an unfolded condition on the front side of the backing member.

Figure 3 is top perspective view of the form of the glove in Figure 2 in a partially folded condition held in place by the locator on the front face of the backing member.

Figure 4 is a top perspective view of the glove in a fully folded condition on the backing member with the rear compression member in a compression condition and the front compression member in an open position.

Figure 5 is a top perspective view similar to that of Figure 4 but showing the front compression member in the process of being folded over to compress the glove.

Figure 6 is a top perspective view showing the front compression member in a fully compressing condition.

Figure 7 is a partial fragmentary view of part of Figure 6 showing the package in more detail.

Figure 8 is a top perspective view of the complete package showing the cover film in a fully shrink wrapped condition forming a compact package.

Detailed Description

The following detailed description relates to a package containing a pair of typical domestic rubber gloves. However, it will be understood that the invention does have broader application to the packaging of other items or pairs or groups of items. Examples of the item include other types of gloves, socks or other compressible articles or the like.

A typical domestic rubber glove includes finger portions for covering the four fingers respectively and a

thumb portion for receiving the thumb of a hand, which extends to a body portion covering the palm and backhand of a hand. The body portion, in turn, extends down to a substantially tubular like wrist portion which contains at
5 its free end, an opening to allow a hand to be inserted into the interior of the glove.

In the drawings there is shown one example of the package of the present invention, generally denoted as 2. Package 2 includes backing member or support member in the
10 form of a cardboard blank 4 having a central panel 5 acting as a support or backing member and two side panels 6, 8 acting as two separate compression members.

Central panel 5 has an upper portion 10 that is
15 essentially curved or semi-circular or similarly shaped such as elliptical and a lower portion 12 which is essentially rectangular. However, it is to be noted that the shape of the panel can be any suitable shape. A hanging aperture 14 is provided at or towards the top of
20 curved portion 10 for hanging package 2 for display from a display hook or the like when displaying the package at a point of sale.

First side panel 6 is hingedly connected to
25 central panel 5 along fold line 16 located along one edge of lower portion 12 and is adapted to be moveable between an outwardly extending position as shown in Figures 1, 2, 3 and 4 which is an open position allowing glove 50 to be folded onto the backing member 5 and a compressing position
30 in which side panel 6 is folded about fold line 16 to overlie the central panel 5 and the finger and/or palm portion of the glove 50 as shown in Figures 5 and 6 so as to compress the glove between the compression member, and the backing member 5. Side panel 6 is provided with a tab
35 7 along a part of the distal edge 9 of panel 6. Tab 7 extends outwardly from the lower part of edge 9. Tab 7 is for fastening the panel 6 to the backing member 5.

The second side panel 8 is also hingedly connected to central panel 5 but along the other side of lower portion 12 by means of fold line 18. Side panel 8 is hingedly moveable about fold line 18 to be superposable on the reverse side of central panel 5 so as to compress gloves 50 between the second side panel 8 and the backing member 5. Side panel 8 is provided with tab 11 extending outwardly from the upper part of distal edge 13. Tab 11 is for fastening side panel 8 to backing member 50.

A slot 20 is provided in the upper part of fold line 16 for receiving tab 11 and a slot 22 is provided in the lower part of fold line 18 for receiving tab 7.

First side panel 6 and second side panel 8 can take any suitable shape or size. A locator in the form of a rebate 24 is formed along a part of lower edge 26 of central panel 5. Rebate 24, in one form, is provided with a pair of oppositely inclined edges 28, 30 in the form of hooks or similar for cooperatively engaging with the sides of glove 50 so as to retain the glove in position on the central panel as the glove is being folded as shown in Figures 2 and 3. It is to be noted that the ends of rebate 24 can get as guides for glove 50 either in addition to inclined edges 28/ 30 for retaining the glove in rebate 24 or in place of inclined edges 28, 30. Typically, the guides are square shoulders (not shown). In addition, the outwardly facing face or side of each panel when in a folded or compressing condition can be printed so as to provide information to a potential customer. A clear film of shrink wrap material 30 in the form of an envelope or similar is located over the arrangement of the glove 50, backing member 5 and compressing elements 6, 8 to form the package 2 in a compressed state.

In forming the package of the present invention a blank 4 having central panel 5 and two side panels 6, 8, having tabs 7, 11 together with foldlines 16, 18 and slots 20, 22 is formed in the appropriate size, shape, style, configuration or the like to suit the particular form of glove 50. A pair of rubber or latex gloves is formed and placed against the front face of central panel 5 so that the finger and/or palm portion of the gloves are in contact with the backing member. A single glove 50 is illustrated in the drawings for reasons of clarity. The wrist portion and open end portion of the gloves 50 is draped over the lower edge 26 of central panel 5 and is located in rebate 24 with the sides of glove 50 being held by oppositely angularly inclined ends 28, 30 located at either end of rebate 24 in the lower edge 26 of lower portion 12 of central panel 50 as shown in Figures 2 and 3. The open end part of the glove is folded about the lower edge in such a manner allowing air to be expelled from inside the gloves. Either simultaneously or sequentially with folding of the gloves, the side panel 8 is hingedly folded about fold line 18 to contact the palm portion of glove 50 to assist in expelling air from inside the glove. As shown in Figure 3 side panel 8 is hinged in the direction of arrow 'A' so that tab 11 can be moved in the direction of arrow 'B' of Figure 4 to be retained in slot 20. When side panel 8 is securely in place side panel 6 is hingedly moved in the direction of arrow 'C' of Figure 4 to overlie glove 50. Tab 7 is moved in the direction of arrow 'D' to be securely retained in slot 22 to secure side panel 6 in place and to partially compress glove 50 as shown in Figure 6.

With the arrangement of the glove 50 and backing member 5 maintained in position a sleeve, bag, envelope, or the like of a shrink wrap film 40 or similar material is placed over the combined arrangement. Heat is applied to the shrink wrap material 40 to shrink the bag onto the glove arrangement to form the package 2. The open end or

ends of the bag or sleeve is heat sealed simultaneously or sequentially with shrinking the material thereby forming a sealed package in which the gloves are compressed so that the package occupies a smaller volume than that occupied by a package that contained gloves not in a compressed state.

Shrink wrapping is a packaging process in which a product is wrapped in a plastic film, such as a polyolefin, and the plastic is then shrunk around the product using a heating process so as to compress the package to a reduced size. In addition to using shrink wrap material the package can be vacuum packed in which air is expelled from the package prior to sealing thereby forming a reduced size package.

In another embodiment of the package 2 of the present invention the backing sheet is provided with a single flap in the form of a laterally extending flap (not shown) having a tab located along the distal end of the flap. The central panel of the backing member is provided with a longitudinally extending slot into which the distal flap can be inserted to secure the flap to the backing member after the flap is folded over the front face of the backing member compressing the glove located on the backing member. In this embodiment the glove is folded upon itself either before placing on the backing member or after placing on the backing member but before folding the flap to compress the glove. In this embodiment the flap is the single compression member attached to the central panel forming the backing member. Also, in this embodiment the glove or gloves is/are not folded over the lower edge of the backing member but rather is/are merely folded upon itself or themselves and sandwiched between the backing member and the front compression member.

The described arrangement has been advanced by explanation and many modifications may be made without

departing from the spirit and scope of the invention, which includes every novel feature and novel combination of features herein disclosed.

5 Those skilled in the art will appreciate that the invention described herein is susceptible to variations and modifications other than those specifically described. It is understood that the invention includes all such variations and modifications which fall within the spirit
10 and scope.

 In the preceding description of the invention, except where the context requires otherwise due to express language or necessary implication, the word "comprise" or
15 variations such as "comprises" or "comprising" is used in an inclusive sense, i.e. to specify the presence of the stated features but not to preclude the presence or addition of further features in various embodiments of the invention.

20

Dated this 5th day of DECEMBER 2003

INTERNATIONAL GROCERY MANUFACTURER PTY LTD

By their Patent Attorneys

GRIFFITH HACK

25 Fellows Institute of Patent and
Trade Mark Attorneys of Australia

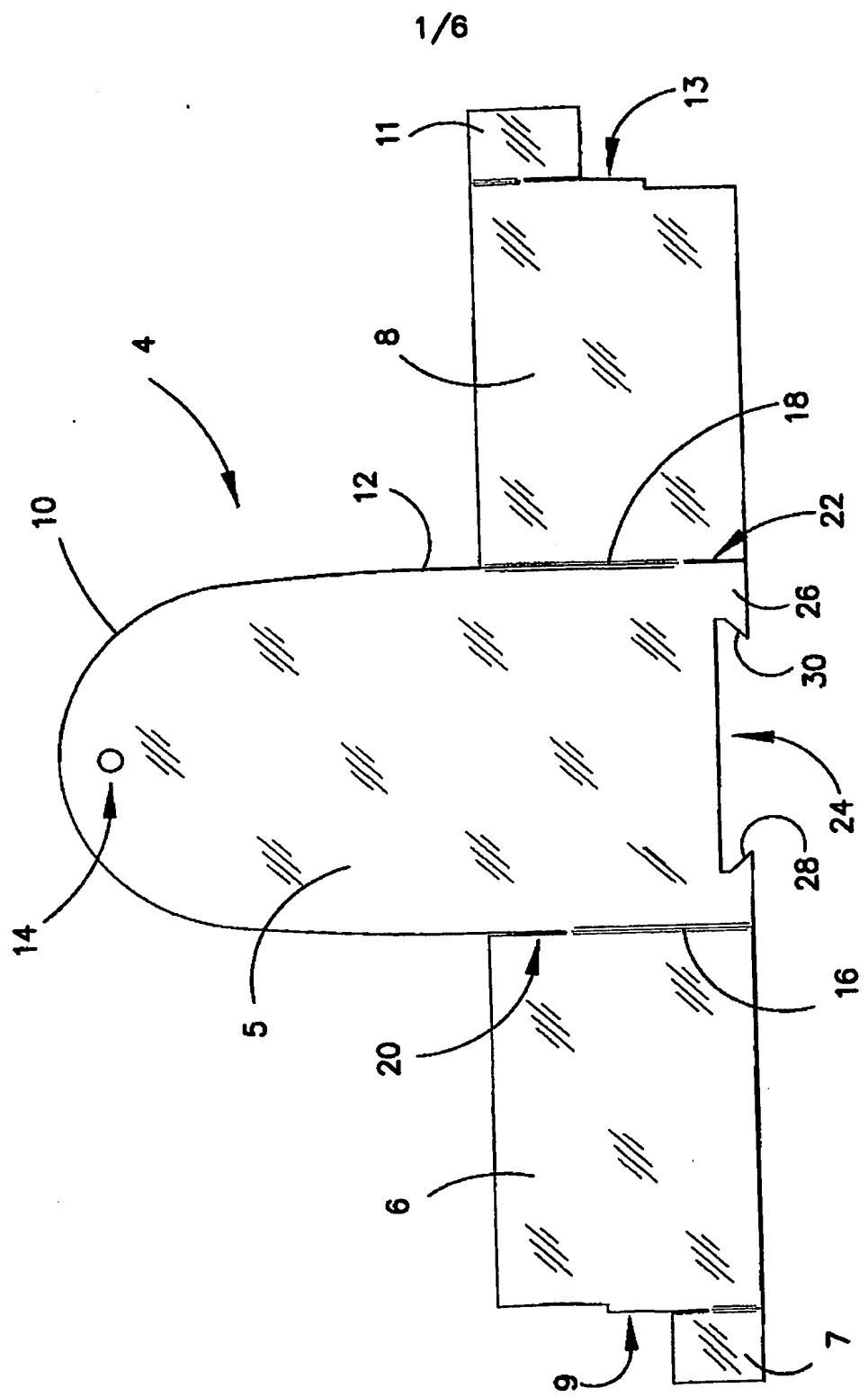


FIGURE 1

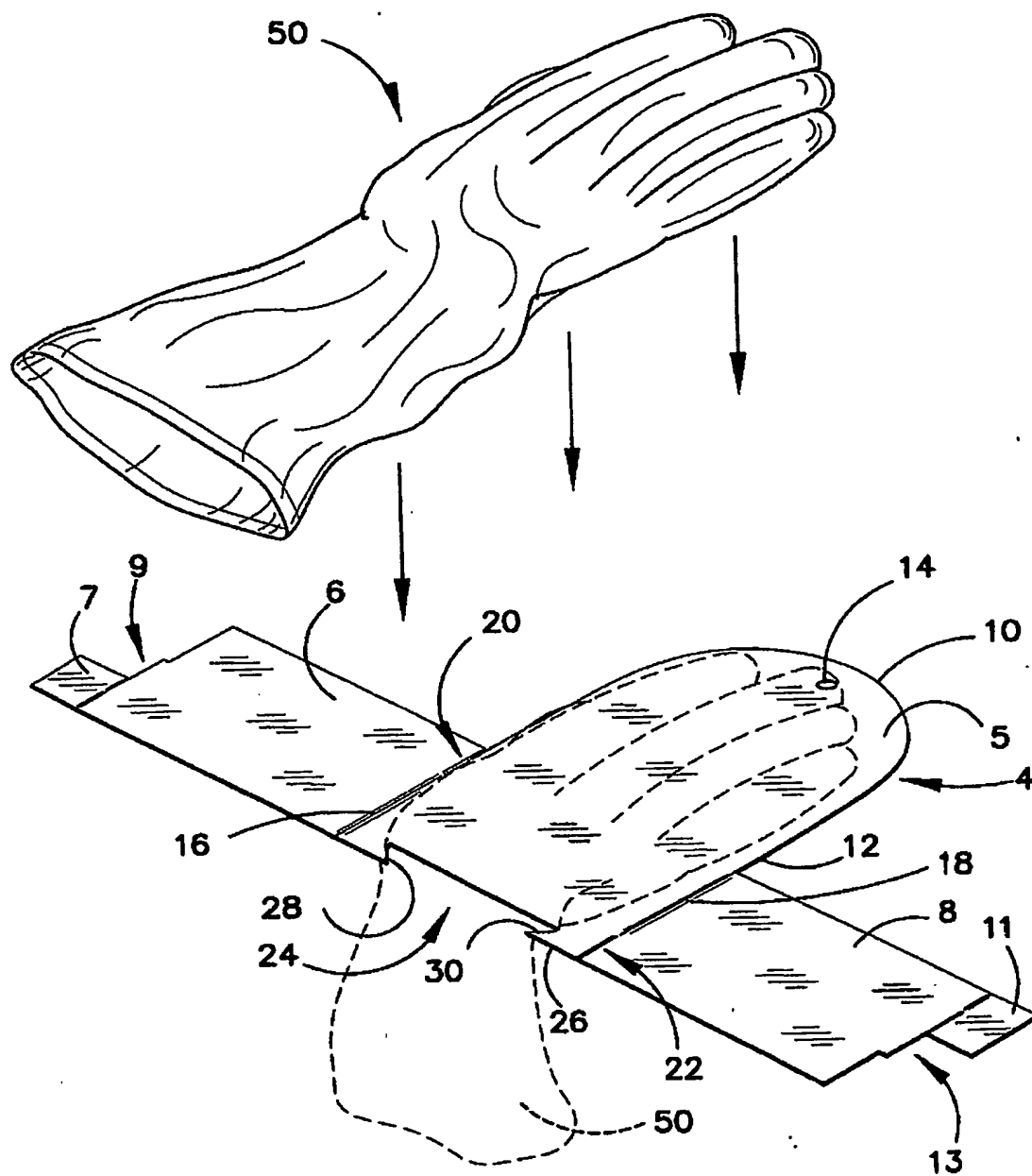


FIGURE 2

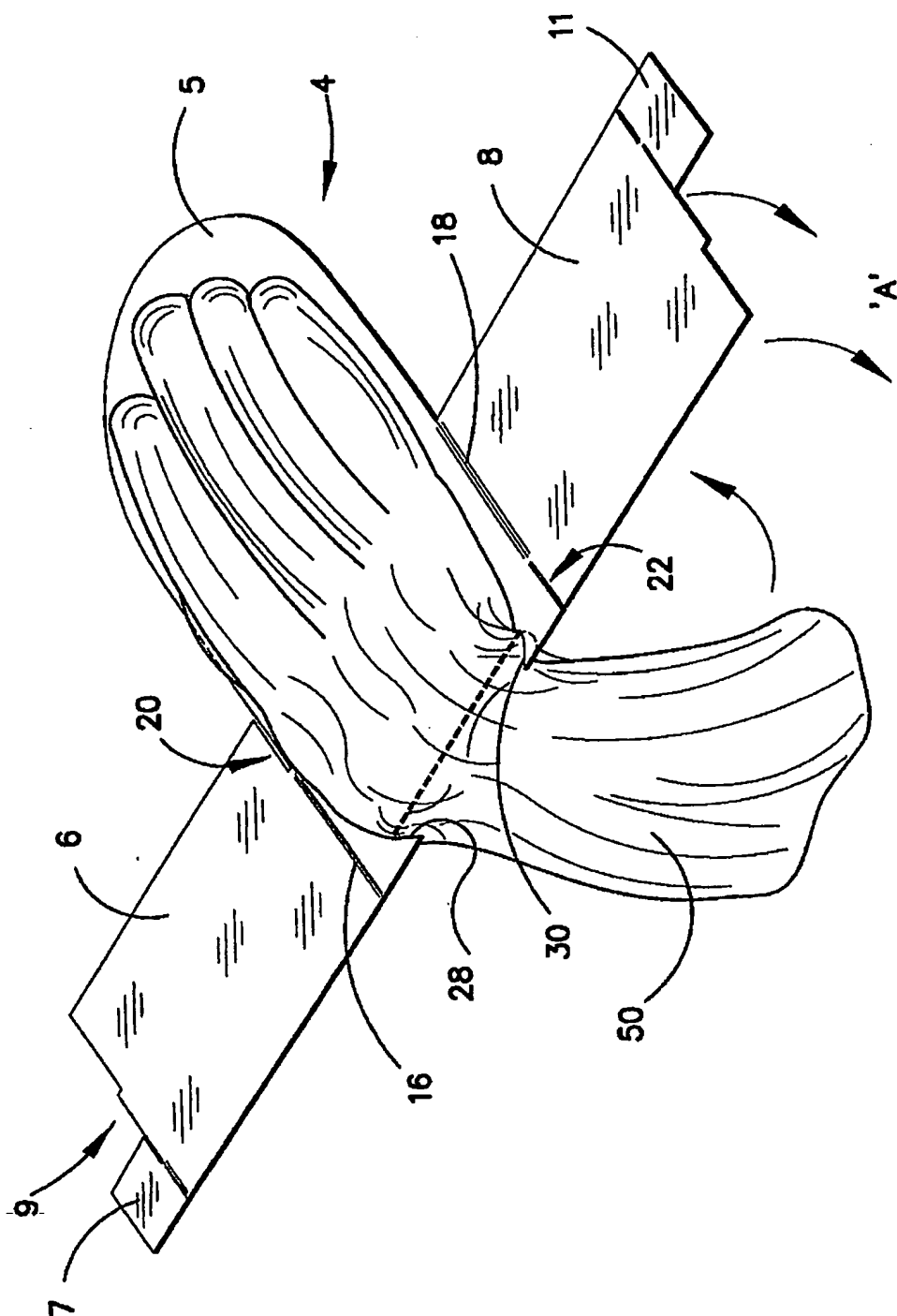


FIGURE 3

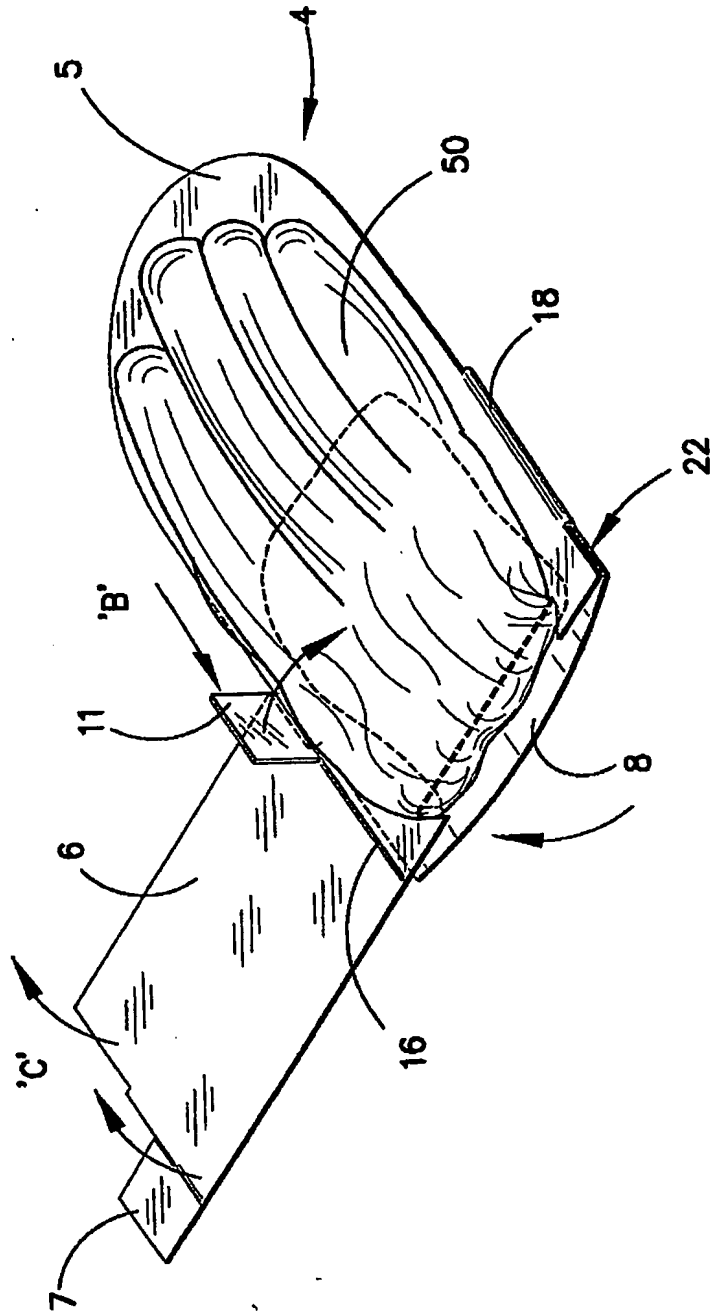


FIGURE 4

5/6

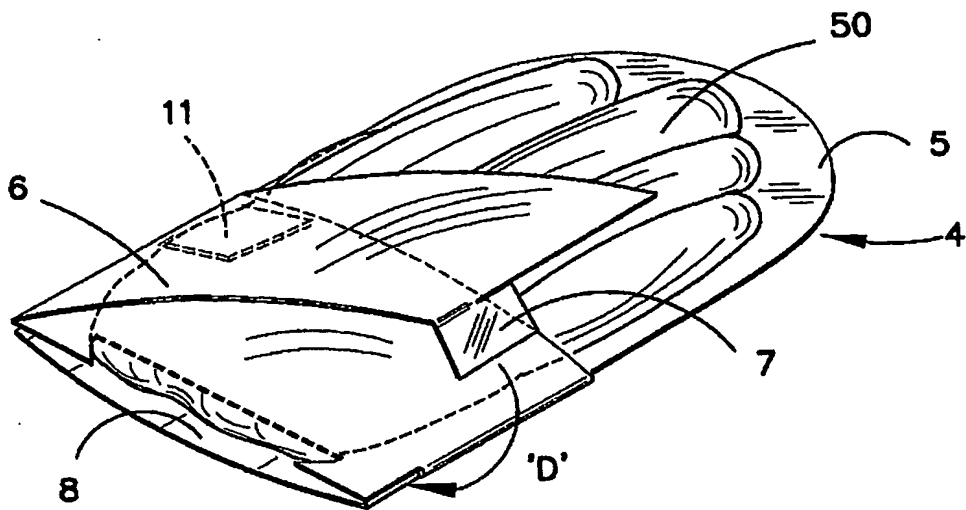


FIGURE 5

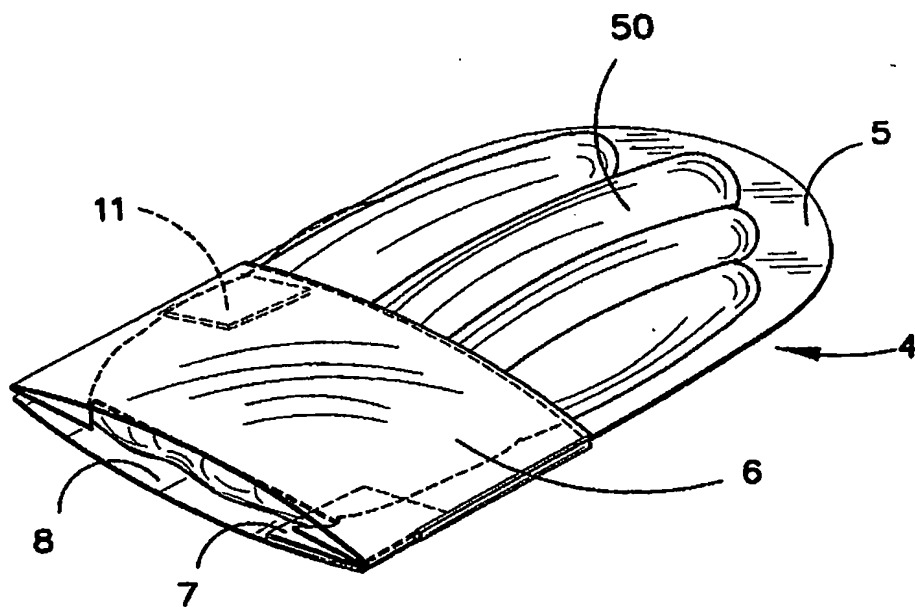


FIGURE 6

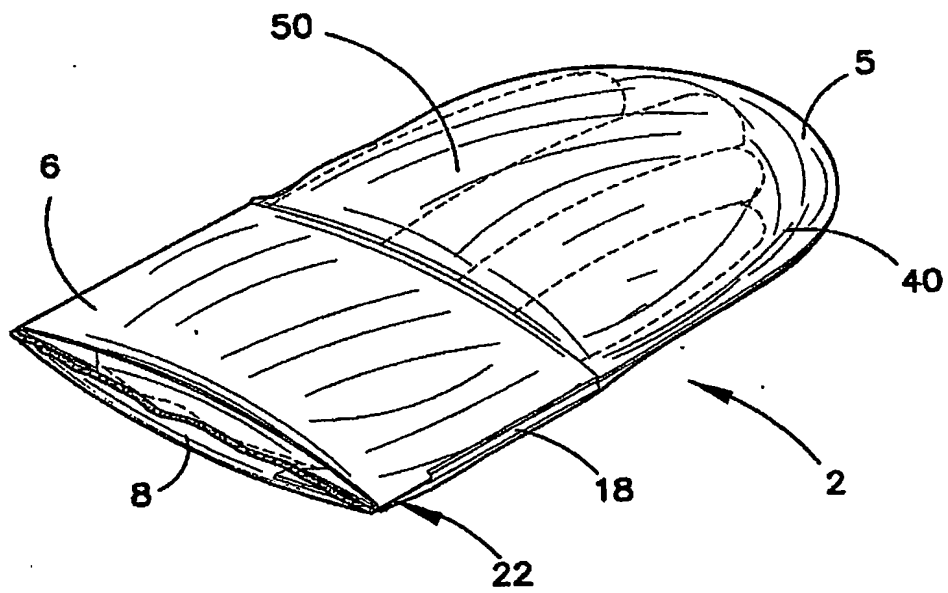
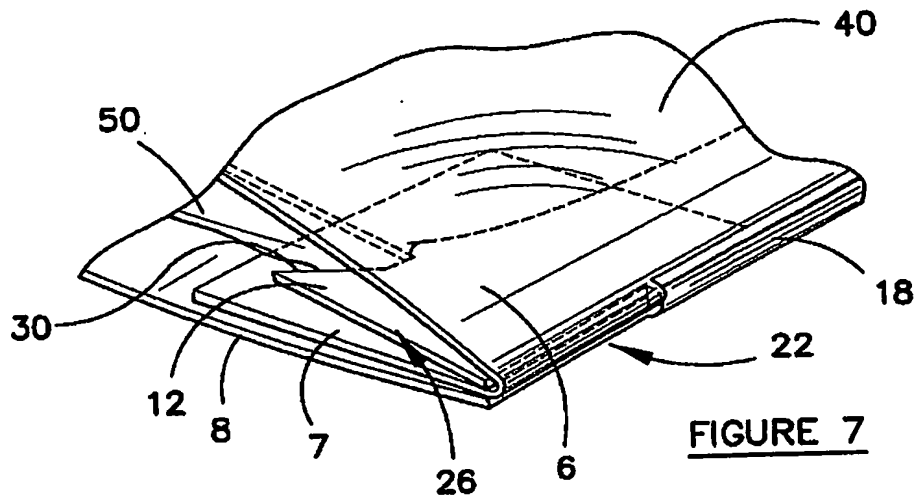


FIGURE 8

Document made available under the Patent Cooperation Treaty (PCT)

International application number: PCT/AU04/001695

International filing date: 02 December 2004 (02.12.2004)

Document type: Certified copy of priority document

Document details: Country/Office: AU
Number: 2003906779
Filing date: 05 December 2003 (05.12.2003)

Date of receipt at the International Bureau: 04 January 2005 (04.01.2005)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b)



World Intellectual Property Organization (WIPO) - Geneva, Switzerland
Organisation Mondiale de la Propriété Intellectuelle (OMPI) - Genève, Suisse